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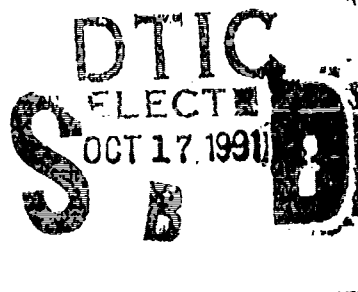


## LEADERSHIP—IT'S MORE THAN FLESH AND BLOOD

BY F. EDWARD BAKER, JR.

COMBAT SYSTEMS DEPARTMENT

28 JUNE 1991



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**NAVAL SURFACE WARFARE CENTER**

Dahlgren, Virginia 22448-5000 • Silver Spring, Maryland 20903-5000

91-13407



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## FOREWORD

The Naval Surface Warfare Center (NAVSWC) has a leadership centered corporate culture. It invests heavily in and fosters the development of technical, managerial, and executive leadership in its people. Leadership development is composed of: professional education and training, career assignments, life experiences, and self-development. Most managers and executives in this research and development (R&D) center have been formally trained as scientists and engineers (S&Es). Few S&Es, if any, have received any scientific or structured leadership training in a college or university curriculum. Since the born leader is a rarity, leadership techniques appear to be primarily learned and developed through experimentation on the job and in community and civic activities. An exception are those individuals who have been introduced to the basics of leadership in the Armed Forces.

Good leaders develop because: individuals are leadership conscious, they have a strong personal desire to lead, and the organization expects them to assume this role. Leaders do not rely on a haphazard approach to development of leadership characteristics. Their awareness of leadership principles allows them to see the complexity of the real phenomena and the achievement to be had through effective application of leadership techniques. For some, leadership skills are natural, but for most they are not.

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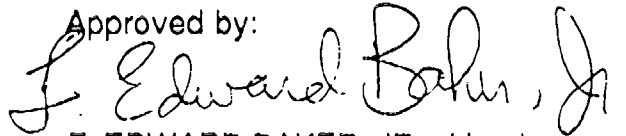
Even though NAVSWC emphasizes leadership as part of the corporate culture, there was a lack of concentration on this topic in training and development programs. The Center, using a systems approach to career development, includes concepts of leadership principles and leadership potential self-evaluation in the group leader, branch head, division head, and executive modules. However, in some programs the leadership modules have not matured at the same rate as other topical materials. For example, one might expect that the "Leadership and Management Development Program" (L&MDP) for Branch Heads and Division Heads would devote significant part of the program to leadership. A significant portion of the program was devoted to leadership related issues such as self awareness, values, ethics, and change. The program did not address what leadership is to provide the context for the leadership related issues nor did it cover the qualities of a good leader. A serious void existed in the NAVSWC leadership program modules and materials. This paper describes an effort to fill this void.

Throughout my professional career in research, development, and engineering, I closely observed individuals in government and industry who achieved positions of responsibility because they possessed, among other qualities, the important ability to lead people. Some possessed leadership qualities and style which inspired ordinary persons to achieve what they believed to be beyond their ability. These observations led me to a desire for a more thorough understanding of "WHAT LEADERSHIP IS?"

This document contains briefing materials prepared for the NAVSWC career development program and presented in the NAVSWC L&MDP and Program Managers (PM) program. The briefing objective was to raise the manager's level of consciousness and understanding of what was expected of them as leaders at NAVSWC and in the R&D community.

The material is not a substitute for scholarly literature on leadership. It is intended to summarize that literature in an R&D Center context, provide ready references, and create provocative discussions during group sessions. It challenges the individual, who gets a glimpse of what leadership means: (1) to seek knowledge of the fundamental principles of leadership, (2) to be inspired to further develop their leadership potential, and (3) to practice those principles in all aspects of their lives.

Approved by:

A handwritten signature in cursive script that reads "F. Edward Baker, Jr.".

F. EDWARD BAKER, JR., Head  
Combat Systems Engineering and  
Assessment Division

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DO YOU?

FUNCTIONS & ACTIONS

SHIP

TES

OF LEADERSHIP

macro look at "What is leadership?" This is  
NS of industrial and military leaders and key  
3. Participants are encouraged to study the

references, seek out other scholarly works on leadership, meet and ask leaders "how they lead and why," and to expand on and improve this material to make others leadership conscious.

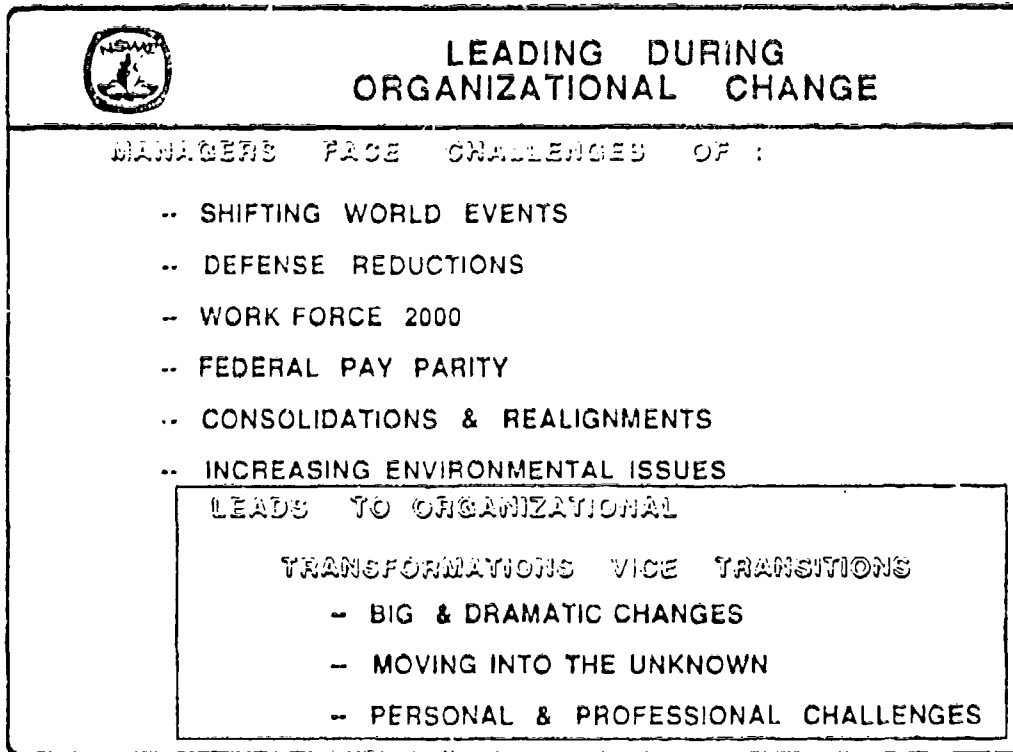


## WHY IS LEADERSHIP IMPORTANT TO YOU?

NAVSWC managers are faced with a period of very dynamic change in: the world, the nation, the federal work force, the defense establishment, and the research and development community.



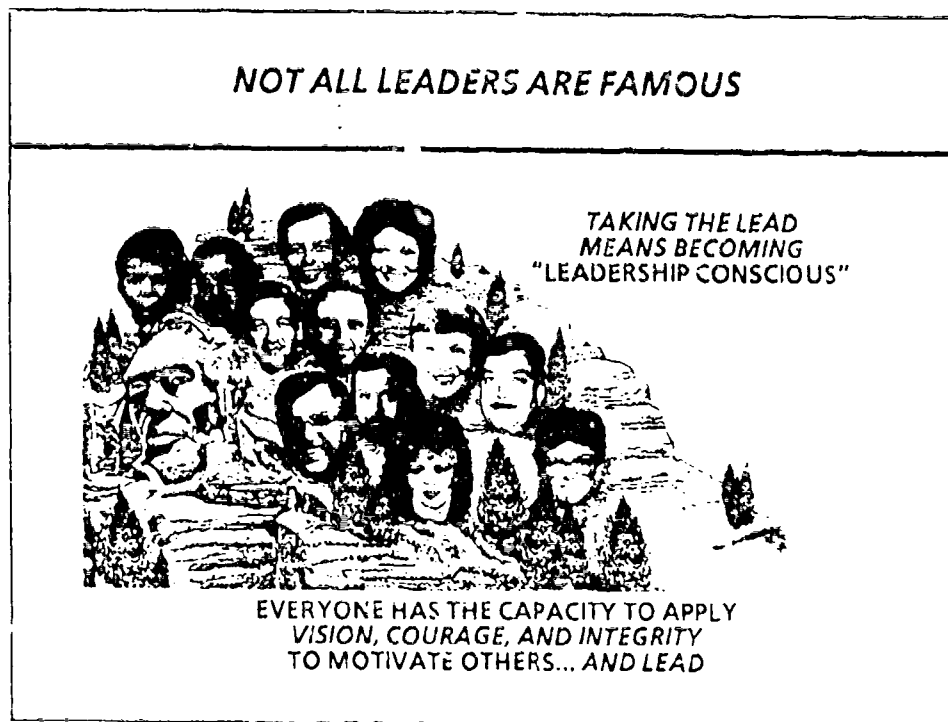
The Cold War has ended. The world geopolitical situation is at a turning point with the fall of the Berlin Wall, the upheaval in Eastern European countries, and the collapse of Moscow's empire.<sup>1</sup> The principal threat to world peace -- the USSR -- is seen by some to have been removed because of the collapse of the Soviet system as demonstrated in its economic chaos. These events have resulted in a congressional reprioritizing within the budget calling for speedy shifts to a leaner military and massive defense dollar reductions between 1990 and 1995.<sup>2</sup> As a result of the Defense Management Review (DMR),<sup>3</sup> the services have prepared implementation plans for base closures and the streamlining<sup>4</sup> of its research, development, test and evaluation (RDT&E) facilities. At the same time, industry and government struggle with: a "Work Force 2000"<sup>5,6</sup> which is here today in terms of accelerated ethnic diversification within the work force; the decline in the number of engineering graduates<sup>7</sup> from our colleges when high technology work skill levels require BS, MS, and Ph.D. degrees; the inability of the Federal Government to hire and retain top notch scientists and engineers (S&Es) leading to calls for federal pay parity; the increased emphasis on high technology and using our R&D base to help solve problems associated with U. S. competitiveness in the global economic market; and the increased consciousness of restrictions, regulations, and costs due to environmental issues.



The events described above are leading to **organizational transformations** and **not transitional changes** as most have experienced in the past. The changes at all levels are projected to be big and dramatic. There will be high levels of uncertainty and unfocused energy. Both risk and opportunity will come from the change. As an R&D organization we are moving into uncharted waters which promises to provide perhaps the greatest personal and professional challenges of our careers. The Center as an institution has to "rise to the occasion" in order to execute its mission in a new world, national, and military order. To be

effective our leaders must be able to accept and implement change originating from below and above. Ideas and methods that were sufficient in the past will no longer be viable in the future. Being leadership conscious is more important than ever to help us chart the waters and lead our organizations through the transformation.

Not all leaders are famous;<sup>8</sup> in fact most leaders are not famous. Ordinary people, like you and me, exhibit leadership behavior during our everyday activities. As leaders, we possess the skills, abilities, and attitudes that enable us to influence people to achieve some goal.



Additionally, our leadership style is under someone's watchful eye when we are at Little League, Campfire Girls, Boy Scouts, participating in civic and community functions, conducting meetings at the office, presenting a professional paper, or just having informal discussions in the cafeteria.

Everyone has the capacity to apply **vision, courage, and integrity** to motivate others to accomplish what they see as an insurmountable mountain and perhaps get them to like doing it. I believe taking the **lead** and providing **effective leadership means** becoming **leadership conscious**. This means understanding the characteristics and tenets of leadership, knowing what it takes to exercise leadership, looking for leadership opportunities, and taking the lead.

## WHAT IS LEADERSHIP?

Leadership is influencing human behavior to achieve some goal. A good leader is said to be able to get people to do things they do not want to do. A great leader is said to be able to get people to do what they don't want to do and to like doing it. What do leaders have in common?

The behavior called "Leadership" has been described in terms of key characteristics or tenets. For example, Sheila Murray Bethel identified 12 common denominators that effective leaders possess. They are:

- |                               |                                 |
|-------------------------------|---------------------------------|
| 1. Has a mission that matters | 7. Is a decision maker          |
| 2. Is a big thinker           | 8. Uses power wisely            |
| 3. Has high ethics            | 9. Communicates effectively     |
| 4. Masters change             | 10. Is a team builder           |
| 5. Is sensitive               | 11. Is courageous               |
| 6. Is a risk taker            | 12. Is committed." <sup>9</sup> |

Bethel's book, **MAKING A DIFFERENCE 12 QUALITIES THAT MAKE YOU A LEADER**, walks through the common denominators providing real life examples and techniques for developing leadership qualities.

The concept of describing leaders in terms of characteristics, traits, or tenets has raised some controversy. Other approaches to leadership include: situational, contingency, and transactional.<sup>10</sup> However, addressing the subject of leadership traits, Kirkpatrick and Locke said:

"While research shows that the possession of certain traits alone does not guarantee leadership success, there is evidence that effective leaders are different from other people in certain key respects. . . . We believe that the key leader traits help the leader acquire necessary skills; formulate an organizational vision and an effective plan for pursuing it; and take the necessary steps to implement the vision in reality."<sup>11</sup>

Leadership traits are used as the vehicle for discussing leadership consciousness in this report.

Roberts' in his book, **LEADERSHIP SECRETS OF ATILA THE HUN**, says that leadership is a privilege. This is an important concept. He says:

"Leadership is the privilege to have the responsibility to direct the actions of others in carrying out the purposes of the organization, at varying levels of authority and with accountability for both successful and failed endeavors."<sup>12</sup>

It is not a right. Followers voluntarily show deference to leaders who take on leadership responsibility. Perhaps then, leadership is a privilege afforded to us by both our followers and our superiors.

As part of the leadership development process, it is important for those who are leadership conscious to spend time reading about individual leaders and leadership. What leaders are your personal heros? Why are, or were, they effective leaders? Why are they your heros?

## NAVSWC MP 91-338

One of my heros is Mr. James Webb. James Webb is a graduate of the U. S. Naval Academy, a combat marine highly decorated for bravery in action in Vietnam, an award winning journalist, and a dedicated public servant who served as the U. S. Secretary of the Navy. Those who have seen James Webb in action know that he is an individual who inspires people and who people want to follow. During an address to the U. S. Naval Academy Midshipmen in 1987,<sup>13</sup> Mr. Webb described the characteristics of a leader as someone who:

1. Sets the example to the strength of his conviction
2. Is a decision maker
3. Has a sense of mission
4. Has the courage (moral and physical) to do what is right and makes sure subordinates do what is right
5. Creates the right tone; one of equity and goodwill
6. Understands human motivation and the environment in which people want to succeed
7. Is a problem solver and a person of action
8. Balances the volatile paradox of - getting the job done and taking care of his people
9. Possesses knowledge in a variety of forms
10. Understands the system and knows how to get things done
11. Has impeccable character
12. Is true to oneself and confident in his own personality
13. Has a sense of vision
14. Has an ability to communicate and give context to the activities of his people.



These leadership characteristics or traits which people identify are very similar and often nearly identical. Drake summarizes leadership characteristics into eight points.



## WHAT IS LEADERSHIP?

### ABILITY TO FOCUS ATTENTION

- STRONG ORGANIZATIONAL SKILLS
- CAPTURE ATTENTION OF EVERYONE IN ORGANIZATION
- CONVEY HIGH DEGREE OF SINGLE-MINDEDNESS
- DEDICATION TO A VISION OR AGENDA FOR THE FUTURE

### EMPHASIS ON SIMPLE VALUES

- ARTICULATES SET OF BASIC VALUES
- STRESSES THEM CONTINUALLY
- FOSTERS UNITY WITHIN THE ORGANIZATION

### CONTACT WITH PEOPLE

- GIVES EMPLOYEES BASIC UNDERSTANDING MESSAGE
- MOLDS ATTITUDES WITHIN ORGANIZATION

### ABILITY TO MANAGE CHANGE

- VISION OF ORGANIZATION'S FUTURE
- SKILLED AT INSTITUTING CHANGE
- MAKES IT HAPPEN

### KNOWLEDGE OF PEOPLE

- ADEPT AT IDENTIFYING & RETAINING TALENTED SUBORDINATES

DRAKE NEWSWEEK OCT 1987



## WHAT IS LEADERSHIP? (CONTINUED)

### AVOIDS "DO-IT-ALL-ISM"

- DIRECTS ATTENTION TO LIMITED NUMBER OF PERFORMANCE INDICATORS
- LETS SUBORDINATES: MONITOR ENVIRONMENT  
SPOT POTENTIAL PROBLEMS  
ALLOCATE RESOURCES

### ACCEPTANCE OF FAILURE

- ABILITY TO DEAL WITH FAILURE
- FACES UP TO SETBACKS
- TAKES BLAME FOR FAILURE
- LEARNS FROM MISTAKES & KEEPS ON MOVING

KNOWS WHEN TO GET OUT OF MARGINAL BUSINESSES  
OR PRODUCTS

**LEADERSHIP - DIRECTING OTHERS TO THE  
ROUTE THEY SHOULD TAKE**

DRAKE, NEWSWEEK, OCT 1987

Rodman L. Drake, in a fictitious leader advertisement placed in the **MANAGEMENT DIGESTS** of **NEWSWEEK** magazine says that:

"No single factor proves of greater benefit to an organization than effective leadership, especially when the economic outlook is less than bright or when wrenching changes are occurring."<sup>14</sup>

What is leadership? How do you determine if someone has it? Articles have been published on choosing and managing one's leadership style<sup>15,16</sup> and seminars are presented on "The Science of Leadership and Art of Gaining Followers."<sup>17</sup> But, what sets leaders apart from others? Effective leaders possess strong organizational skills and have an ability to capture the attention of people within the organization. Through their high degree of single mindedness and future vision orientation they are able to overcome roadblocks, disappointments, and side tracks. They have emotional stamina and inner strength to overcome failure and lead

others through adversity. They have a dedication to a compelling vision that inspires people to focus their energy in the direction of that vision. This behavior inspires or motivates others to follow by wanting to achieve and make a difference.

Leaders articulate and continually stress a simple set of values which foster cohesion and unity within the organization. I like to use as an example the Boy Scout Law -- A scout is: trustworthy, loyal, helpful, friendly, courteous, kind, obedient, cheerful, thrifty, brave, clean, and reverent.<sup>18</sup> They set the tone for behavior and individual actions. These are a simple set of values which I have personally experienced as fostering unity within the Boy Scouts of America units to which I belonged and led.

General Colin Powell, chairman of the Joint Chiefs of Staff, provided another perspective of values or rules that a leader lives by.<sup>19</sup>



### GENERAL GLEN POWELL'S RULES OR THOUGHTS TO LIVE BY

1. IT AIN'T AS BAD AS YOU THINK. IT WILL LOOK BETTER IN THE MORNING.
2. GET MAD, THEN GET OVER IT.
3. AVOID HAVING YOUR EGO SO CLOSE TO YOUR POSITION THAT WHEN YOUR POSITION FAILS, YOUR EGO GOES WITH IT.
4. IT CAN BE DONE.
5. BE CAREFUL WHAT YOU CHOOSE. YOU MAY GET IT.
6. DON'T LET ADVERSE FACTS STAND IN THE WAY OF A GOOD DECISION.
7. CHECK SMALL THINGS.
8. SHARE CREDIT.
9. YOU CAN'T MAKE SOMEONE ELSE'S CHOICES. YOU SHOULDN'T LET SOMEONE ELSE MAKE YOURS.
10. REMAIN CALM. BE KIND.
11. HAVE A VISION. BE DEMANDING.
12. DON'T TAKE COUNSEL OF YOUR FEARS OR NAYSAYERS.
13. PERPETUAL OPTIMISM IS A FORCE MULTIPLIER.

**WHAT ARE YOUR  
LIFE RULES & THOUGHTS?**

SOURCE: WASHINGTON POST,  
PARADE MAGAZINE, AUGUST 12, 1991

## NAVSWC MP 91-338

It is important for you to stop -- take a minute -- and write down your life rules and values. Organizations also have values stemming from their purpose, mission, and role in society. NAVSWC has identified the organization's values as:

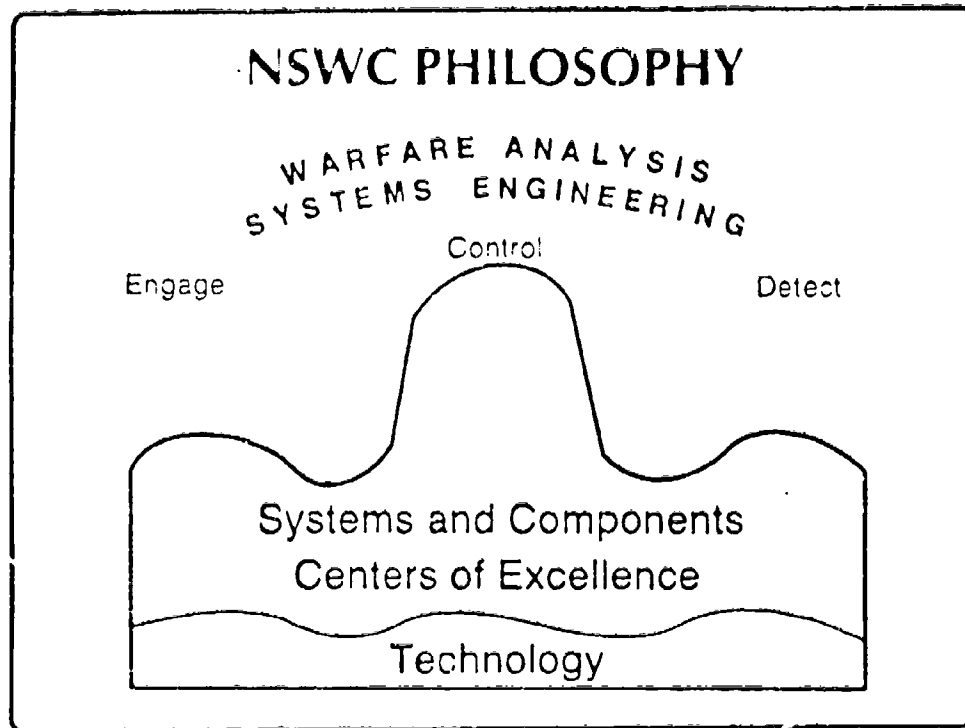


### NAVSWC IS CHARACTERIZED BY:


- TECHNICAL COMPETENCE
- RISK TAKING
- FLEET CONNECTIVITY
- FULL SPECTRUM
  - TECH BASE
  - DEVELOPMENT
  - FLEET SUPPORT
- DOING, NOT OVERSEEING
- FUTURE NAVY NEEDS ORIENTED
- PRODUCT ORIENTATION

What do these NAVSWC organizational values mean to you? What do these values mean to our chief executive, senior Center management, and your followers? It is up to NAVSWC leaders to know and articulate the organization's values to their followers. Leaders somehow find or make time to be with their people: molding attitudes, fostering a sense of purpose, emphasizing personal contributions to the organization, empowering employees to take initiative, aligning the employees around the purpose and vision, and gathering feedback and ideas.

Symbols can be powerful and effective tools for leaders. NAVSWC has used symbology to convey its corporate philosophy and sense of purpose.



The Center has also used strategic planning techniques<sup>20,21</sup> since 1982 to develop and articulate, for example, its vision of the future, basic values, and business view of the future.<sup>22</sup> As an example, in its third cycle of strategic planning conducted during the 1988 time frame, the Center viewed itself circa 1995 as a balanced R&D Center with the following business base and priorities. The power of this vision comes from representing the entire Center with a single chart. Because of dynamic changes, this vision will be reassessed. NAVSWC's strategic flexibility and leadership will be demonstrated in defining a new vision.

<div>  <b>BALANCED R&amp;D CENTER</b> </div>				
TECHNICAL RESOURCES (APPROX. 3100 WYRS)				
MAJOR PROGRAM	PRIORITY ONE	PRIORITY TWO	PRIORITY THREE	PRIORITY FOUR
SQQ-89	ASW	MIW	SPEC WARF	OTHER
AEGIS, SM2	AAW	AMW	MARINE CORPS	
TOMAHAWK	ASUW			
SLO-32, AIEW	EW			
SLBM	STRATEGIC			
<hr/> GROUP 1 approx 1500      GROUPS 2, 3, 4 approx 600      MATRIX TECH DEPTS approx 1000				
GOALS <ul style="list-style-type: none"> <li>• 20 - 60 - 20 AND SYSTEMS ORDNANCE (COMPONENTS) BALANCE</li> <li>• TECHNOLOGY ACROSS ALL OF THE ABOVE</li> <li>• ORDNANCE U/W WARHEADS, MATERIALS CENTERS OF EXCELLENCE</li> </ul>				
SUPPORT RESOURCES (approx. 1800 WYRES) <ul style="list-style-type: none"> <li>• MAJOR SUPPORT DEPARTMENTS, COMPUTER, ENGINEERING, &amp; CORPORATE SECTORS, &amp; TECHNICAL INDIRECT</li> </ul>				

Strategic plans, corporate philosophy, and organizational values all imply a desired future state -- the raw material for leading. Effective leaders within NAVSWC will strive to understand these concepts and integrate them into their leadership planning and daily actions.

NAVSWC, its managers, and executives will be strained dealing with the magnitude changes described on page 4. It is already happening. Employees will be looking to the Center's leadership to step out in front and direct them to the route they should take. The leader displays a keen awareness that **people are his most important resource**. He or she is adept at identifying and retaining talented subordinates. This task can become very difficult during times of great change unless much trust exists between employees and the organization's leaders. No amount of leadership behavior will get employees to follow without trust and confidence in the leaders.

**EFFECTIVE LEADERS** know that things get done through people. They have confidence in themselves in a way that stimulates others to grasp the leaders vision and act accordingly. This encourages followers to have confidence in them. They point followers in a direction and get out of the way. This allows attention to be directed to a limited set of performance indicators.

Leaders have an ability to deal with failure, disappointment, or setbacks. In fact as risk takers, they expect some failures. They realize the importance of learning from mistakes and that it is a part of moving on toward their future vision. They have the courage to share their failures with followers knowing that humility creates respect.

There are definite differences between industry and government. A trait of the leader is knowing when to get out of marginal business or products. These are usually difficult decisions. Government organizations by their very nature sometimes must remain in what industry might see as "marginal business" for reasons of public interest or national security. However, in government the effective leader is able to move the organizations business base toward those areas which will maximize achievement of the organization's mission and future vision.

In 1983, Kiefer and Stroh discussed the characteristics of organizations producing extraordinary results and innovation. They state that "Organizations capable of inspired performance appear to have several key elements."<sup>23,24</sup>



CHARACTERISTICS OF ORGANIZATIONS  
PRODUCING  
EXTRAORDINARY RESULTS & INNOVATION

- A DEEP SENSE OF PURPOSE
- A VISION OF WHAT THE ORGANIZATION STANDS FOR OR STRIVES TO CREATE
- ALIGNING OF INDIVIDUALS AROUND THE PURPOSE & VISION
- AN EMPHASIS ON PERSONAL PERFORMANCE & EMPOWERMENT OF EVERYONE IN THE ORGANIZATION
- EFFECTIVE STRUCTURE THAT ENABLES RATHER THAN THWART REALIZATION OF THE VISION
- THE ACCEPTANCE OF INTUITION AS A COMPLEMENT TO REASON


\*KIEFER & STROM "A NEW PARADIGM FOR DEVELOPING ORGANIZATIONS"  
IN TRANSFORMING WORK, MILES RIVER PRESS 1984  
\*THE BUREAUCRAT, SUMMER 1990 VOL 19 #2 P22

It is worth noting the similarity of this chart and Drake's leadership traits. Clearly effective leadership must have been in place at the organizations which produced extraordinary results.



## CRITICAL LEADERSHIP AREAS

In June of 1987 at a U.S. Naval Academy Leadership Conference, Admiral C. A. E. Trost, the Chief of Naval Operations, presented an address entitled "Leadership is Flesh and Blood."<sup>25</sup> Admiral Trost stressed that leadership emphasis needed to be applied in four areas: ethics, personal example, getting the most out of resources, and providing a spark of relevance.



### CRITICAL LEADERSHIP AREAS

**HIGH ETHICAL STANDARD**

- ABILITY TO DISCRIMINATE BETWEEN RIGHT & WRONG
- ETHICAL BASE AS SOURCE OF DECISIONS
- ACTS HONORABLY WHEN CHIPS ARE DOWN

**PERSONAL EXAMPLE**

- PERSONAL EXAMPLE MUST OPERATE FROM STRENGTH  
MORAL    INTELLECTUAL    PHYSICAL
- PROFESSIONAL EDUCATION
- GETTING OUT & OBSERVING FIRST HAND
- INDIVIDUAL EXPERTISE. BE POSITIVE, PROFESSION OF DOERS
- ENTHUSIASM IS AS INFECTIOUS AS DEFEATISM

**GET THE MOST OF ALL THE RESOURCES AVAILABLE**

- KNOW YOUR PEOPLE
- KNOW THEIR:  
CAPABILITIES, LIMITATIONS, AMBITIONS,  
COMMUNICATION STYLE, APPROACH TO A PROBLEM
- UNDERSTAND PERSPECTIVE OF MINORITIES & WOMEN
- ENSURE ALL PEOPLE ARE CHALLENGED
- APPEAL TO THEIR STRENGTHS

ADM C. A. E. TROST, USA  
CNO USNA, 10 JUNE 1987

## NAVSWC MP 91-338

We saw that one of Bethel's 12 leadership qualities was "has high ethics," and Jim Webb said that leaders must have impeccable integrity and courage to do what is right. Leaders set for themselves high ethical standards and have scrupulous honesty. They use their high integrity and these standards as a basis to discriminate between right and wrong and as the basis for decisions. Few would follow deceiving leaders for very long. Followers watch their leaders actions and look to leaders for example. Therefore, leaders must demonstrate through their personal example moral, intellectual, and physical strength. If the leaders act in unethical and immoral ways and allow themselves to not be physically fit, the message to his or her followers is "its ok." Leaders must set the example of the importance of continuing professional education and personal growth if they expect followers to value it. An attitude of optimism can overcome many barriers, and a leaders' enthusiasm is as infectious as defeatism. It has been stated that "As you think so you become. Think like a Champion." People in an organization who think like champions will be champions. Mental attitude is 95 percent of the battle of winning or achieving the impossible.

People are a leader's most important resource, and to be effective he or she must understand the meaning of that. A leader will know his people in terms of capabilities, limitations, ambitions, communication style, and approach to problems. He will strive to ensure that all people are challenged and appeal to their strengths in getting them to accomplish more then they believed they could.



**CRITICAL LEADERSHIP AREAS**  
(CONTINUED)

PROVIDE SPARK OF RELEVANCE THAT FORETELLS SUCCESS

- PEOPLE "RESPOND" TO CLEAR DIRECTION
- PEOPLE "ACCOMPLISH" TASKS UNDER GOOD MANAGEMENT

"PEOPLE GIVE THEIR ALL --  
AND EVEN MORE THAN THEIR ALL"

TO THE  
LEADER WHO }

- STIRS THEIR BLOOD
- SHOWS THEM HOW UNIQUE & REMARKABLE THEY ARE
- SHOWS THEM HOW VALUABLE THEIR CONTRIBUTION IS

Employees want to feel that they are valued and that their work makes an important contribution. They will respond to clear direction. However, they look to their leader to "light their fire" showing them how remarkable they are and how valuable their contribution is. To this leader people don't give their all; they give even more than their all.<sup>25</sup>

## LEADERSHIP AND MANAGEMENT -- FUNCTIONS AND ACTIONS

It is important to examine the difference between management and leadership. Most of us, in organizations of any size, have observed managers whose units are efficient, productive, and produce quality products.<sup>26</sup> They tend to be well oiled and run like clockwork.



### MANAGER OR LEADER


"Any competent manager can make it possible for people in the organization to make a living. An excellent manager can see to it that work is done productively and efficiently, on schedule, and with a high level of quality.

It remains for an effective leader, however, to help people in the organization know, pride and satisfaction in their work. Great leaders often inspire their followers to high levels of achievement by showing them how their work contributes to worthwhile ends."

#### LEADER

Warren Bennis & Burt Nanus  
New York: Harper & Row 1985 pp22-92

And, if we do not observe outward signs of leadership, we have probably wondered why those managers are there-- what do they do? We look to find people who know pride and satisfaction in their work and who are inspired to high level of achievement through a sense of mission.<sup>27</sup>

 **LEADERSHIP AND MANAGEMENT**

- Two distinctive & complementary systems of action
- Each has - own function & characteristic activities
- Both necessary for organizational success
  - strong leadership & weak mgm't no better than reverse

**ORGANIZATIONS CHALLENGE**

- COMBINE STRONG LEADERSHIP & STRONG MGM'T
- USE EACH TO BALANCE THE OTHER

Harvard Business Review May/June 1990

What we are observing in action is that leadership and management are two distinctive and complementary systems of actions.<sup>28</sup> Both, strong leadership and sound management, are necessary for organizational success. They are complementary traits. Vice Admiral Rowden writing on the line between leadership and management said:

"The difference is this: the astute leader recognizes the capabilities of individual subordinates and uses wisdom in delegating responsibilities; the skillful manager develops and administers the organizational processes that facilitate the best use of people, and then coordinates their activities with the mission of the organization."<sup>29</sup>

Senior executives face the challenge to balance leadership and management needs when staffing each management position because strong leadership and weak management is no better than the reverse.

On leadership, Admiral Rowden said:

"It is a subject that can be studied taught, and debated. But, I believe it is mostly a personal quality, something inherent in the gut or psyche of an individual. . . . If given a choice, I'd choose the young officer with natural leadership skills. I'd have more confidence that he could learn to manage than that a good manager could learn to lead."<sup>29</sup>

Leadership may be inherent in the gut or psyche of an individual, but for most leadership potential takes time, learning, and experience to develop. If most R&D managers are selected from a pool of S&Es who have no leadership training, then it becomes critical for the organization to teach, foster, and develop leadership consciousness as early as possible in its people's careers.




## MANAGEMENT FUNCTION

- COPING WITH COMPLEXITY

-- TO BRING DEGREE OF ORDER & CONSISTENCY  
TO QUALITY & PROFITABILITY OF PRODUCTS

HARVARD BUSINESS REVIEW MAY-JUNE 1990

A primary management function is to provide a structured process -- order -- for getting things done with quality products.

 **MANAGEMENT ACTIVITIES**

**Activities**

- **PLANNING & BUDGETING**
  - Setting targets or goals for future
  - Establishing detail steps to achieve targets/goals
  - Allocating resources to accomplish plans
- **ORGANIZING & STAFFING**
  - Creating organizational structure & set of jobs
  - Staffing with qualified people
  - Communicating the plan
  - Delegating responsibility for execution
  - Devising system to monitor implementation
- **CONTROLLING & PROBLEM SOLVING**
  - Formally & Informally monitor results versus plan
  - Identify deviations
  - Plan & organize to solve problems

HARVARD BUSINESS  
REVIEW, MAY-JUNE 1980

When we read one of the myriad of management books or attend a management training course, the management activities presented usually include: planning and budgeting, organizing and staffing, and controlling and problem solving. These are subjects that readily lend themselves to textbooks and classroom training.





## LEADERSHIP FUNCTION

Coping with change - because world more  
competitive and volatile;  
change necessary to survive  
and compete effectively

HARVARD BUSINESS REVIEW  
MAY-JUNE 1990

A principal leadership function is coping with change.



## LEADERSHIP ACTIVITIES

### ● SETTING A DIRECTION

- developing a vision of future  
(ambitious; strain boundaries of what is deemed possible)
- developing strategies to produce change  
(map out route that will end at the desired point)

### ● ALIGNING PEOPLE

- communicating new direction
- create coalitions that understand  
vision & are committed to its achievement
- getting people to believe the message & path to get there

### ● MOTIVATING AND INSPIRING

- keeping people moving in right direction despite  
major obstacles to change (energizing behavior)
- appealing to basic human needs, values, & emotions

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Leadership activities associated with this function are: setting a direction, aligning people, motivating, and inspiring. Once again we note the similarity of these activities and either Bethel's or Drake's list of leadership qualities.

In summary, differences between managers and leaders, Blank says, are:<sup>17</sup>

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**MANAGERS**

Have subordinates

Rely on formal authority

Follow prescribed patterns

Are given the manager role

**LEADERS**

Have followers

Use influence beyond  
authority

Do more than is prescribed

Take the leadership role

## PROFESSIONAL FOLLOWERSHIP

An important dimension of leadership is that it is not a singular activity. It requires a team orientation. Effective leaders must be partners in accomplishing the overall mission of the organization -- a good follower.

Gilbert identifies eight key behaviors of a good follower.



### EFFECTIVE LEADERS MUST BE GOOD FOLLOWERS

#### KEY BEHAVIOR OF GOOD FOLLOWER:

- BE A PARTNER WITH YOUR BOSS
- HAVE A "CAN DO" ATTITUDE
- DEVELOP YOUR TECHNICAL SKILLS
- BE DEPENDABLE
- SHARE HUMOR
- ACT PROFESSIONALLY
- DEMONSTRATE POSITIVE RELATIONSHIPS
- SPEAK UP WITH VITAL INFORMATION

GOVERNMENT EXECUTIVE JUNE 1990

Gilbert says:

"As a manager, you need to be aware of the qualities inherent in good followers -- and demonstrate them in your relations with your own superiors."<sup>30</sup>

## GOOD LEADER ATTRIBUTES



### A GOOD LEADER

- UNDERSTANDS WHAT'S GOING ON  
"MAINTAINS THE BUBBLE"
- KNOWS THE RIGHT THING TO DO
- DOES THE RIGHT THING THROUGH SUBORDINATES  
ORGANIZED & MOTIVATED TO APPLY THEIR  
BEST ABILITIES TO THE PROBLEM

ADM C. A. E. TROST, USN  
CNO - USNA, 10 JUNE 1987

A good leader is one who maintains the bigger picture and has an understanding of the context of what is going on.<sup>25</sup> They have good judgement and the insight to make good decisions. He or she will know the right thing to do and be able to integrate knowledge and experience to do the right things. This will be achieved through their "most valuable

resource people" because the leader has organized, motivated, and inspired them to reach above and beyond their ability. The people will think of themselves as champions and they will be champions.




## GOOD LEADERS

- ALWAYS ARTICULATE THE ORGANIZATIONS VISION
- REGULARLY INVOLVE PEOPLE IN DECIDING HOW TO ACHIEVE THE ORGANIZATION'S VISION
- SUPPORTS EMPLOYEE'S EFFORTS TO REALIZE THE VISION THROUGH COACHING, FEEDBACK, & ROLE MODELING
- RECOGNIZE & REWARD SUCCESS
- REPRODUCE LEADERSHIP ACROSS ENTIRE ORGANIZATION

The leader in action continuously applies all leadership techniques known to him or her. Examples might include:

- \* increasing the face-to-face contact with each person;
- \* sharing mistakes with the people;
- \* regularly providing positive feedback;
- \* asking people what isn't working the way it should be and why;
- \* recognizing, rewarding, and celebrating successes with the people;
- \* articulating the organization's vision;
- \* involving people in deciding how to achieve the organization's vision;
- \* nurturing future leaders and increasing leadership capacity.

## CREATING A CULTURE OF LEADERSHIP



### CREATING CULTURE OF LEADERSHIP

- RECRUIT PEOPLE WITH LEADERSHIP POTENTIAL
- MANAGE THE CAREER PATTERN - WHAT WILL BE NEEDED TO STRETCH & DEVELOP THEM
- PROVIDE EARLY CAREER (20 & 30'S) OPPORTUNITIES TO TRY TO LEAD, TO TAKE RISK, TO LEARN FROM TRIUMPHS AND FAILURES
- PROVIDE CHANGE TO GROW BEYOND NARROW BASE
  - BROAD JOB ASSIGNMENTS
  - SPECIAL TASK FORCE ASSIGNMENTS
  - LENGTHY GENERAL MANAGEMENT COURSE
  - NETWORK OF RELATIONSHIPS

HARVARD BUSINESS REVIEW MAY-JUNE 1990

NAVSWC has over its history institutionalized leadership as part of its corporate culture.<sup>31</sup> Valuing strong leadership and striving to create it will be even more important during times of dynamic and rapid change.



## NAVSWC MP 91-338

Managers at all levels and senior executives, who will be wrenched daily through dealing with organizational change and economic uncertainty, must step back and spend time planning for leadership potential development. For certain positions, people recruited should be evaluated for their leadership potential. Career patterns should be managed to stretch and develop people through small and medium size leadership jobs. Early career opportunities to take risk and lead should be fostered such that individuals can learn from triumphs and failures. The organization should foster chances to grow through: broad job assignments via the Navy Scientist and Technical Exchange Program (NSTEP) and the Navy Science Assistance Program (NSAP); special task force assignments internal and external to the Center; formal general management programs like the Massachusetts Institute of Technology (MIT) Sloan Fellows program; and development of networks of relationships in the Center and other organizations.<sup>28</sup>

Speaking on Leadership, Teddy Roosevelt said:

"It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, and comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows the great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who know neither victory nor defeat."<sup>32</sup>

REFERENCES

1. "The Turning Point," **WASHINGTON POST**, 14 Jan 1990, pp. A33-A40.
2. "Pentagon Cancels 13 Weapons," **DEFENSE NEWS**, 4 Feb 1991, p. 30.
3. "Defense Management Report" by SECDEF to the President, 12 Jun 1989.
4. "SECNAV Approves Streamlining Initiative," **The Observer**, 24 Dec1990, p. 3.
5. **Workforce 2000 Work and Workers for the 21st Century**. Hudson Institute. Indianapolis, IN, Jun 1987.
6. "Asian, Hispanic Numbers in U. S. Soared in 1980s, Census Reveals," **WASHINGTON POST**, 11 Feb 1991.
7. "Number of Engineering Grads Continues Decline," **ENGINEERING TIMES**, 1991.
8. Voell, Richard A., "Not All Leaders Are Famous," **Center**, Sep/Oct 1988, pp. 16-21.

NAVSWC MP 91-338

9. Bethel, Sheila Murray, **Making A Difference 12 Qualities that Make You a Leader**, Berkley Books, New York, 1990.
10. "Leadership for the New Millennium," **National Forum**, The Phi Kappa Phi Journal, Winter 1991, [see "Teaching and Assessing Leadership Courses: Part One The John F. Kennedy School of Government, pp. 21-25].
11. Kirkpatrick, Shelly A., and Locke, Edwin A. "Leadership: do traits matter?" **Academy of Management Executive**, 30 Sep 1987.
12. Roberts, Wess, **Leadership Secrets of Attila the Hun**, Warner Books, New York, NY, 1987.
13. Webb, James, Forrestal Lecture, USNA Video Tape, 30 Sep 1987.
14. Drake, Rodman L., "Leadership: It's a Rare Blend of Traits," **NEWSWEEK**, Management Digest, 5 Oct 1987, pp. S-8 & S-12.
15. Tannenbaum, Robert, and Warren H. Schmidt, "How to Choose a Leadership Pattern," **Harvard Business Review**, May-Jun 1973, p. 162.
16. Slevin, Dennis P., Katz, Joseph M., Pinto, Jeffrey K., "Project Leadership: Understanding and Consciously Choosing Your Style," **Project Management Journal**, No. 1, Vol. XXII, Mar 1991, pp. 39-47.
17. Blank, Warren, "The Science of Leadership and Art of Gaining Followers," The Leadership Group Seminar at The Federal Executive Institute, Sep 1990.
18. **Field Book**, Boy Scouts of America, Irving Texas, 1981, pp. vi-vii.

**NAVSWC MP 91-338**

19. "It Can Be Done, A Profile," **Washington Post**, Parade Magazine, 13 Aug 1989.
20. Baker, F. Edward, Jr., **Executive Summary The Institutionalization of Private Sector Strategic Planning Methods in a Public Sector Research & Development Organization - The Naval Surface Warfare Center Case 1982-1989**, NAVSWC MP 89-322, 1 Feb 1990.
21. Baker, F. Edward, Jr., **The Institutionalization of Private Sector Strategic Planning Methods in a Public Sector Research & Development Organization - The Naval Surface Warfare Center Case 1982-1989**, NAVSWC MP 89-324, 1 Feb 1990.
22. **A Strategic Perspective on the Future of the Naval Surface Warfare Center**, NAVSWC MP 88-129, May 1988.
23. Kiefer, Charles, and Stroh, Peter "A New Paradigm for Organizational Development," **Training and Development Journal**, Apr 1983, pp. 26-35.
24. **The Bureaucrat**, Summer 1990, Vol. 19, No. 2, p.#22.
25. Trost, C. A. E., "Leadership is Flesh and Blood," USNA Leadership Conference, 10 Jun 1987.
26. Bennis, Warren, and Nanus, Burt, **LEADERS**, New York, Harper & Row, 1985, pp. 92-93.
27. Abel, Christopher A., "Lighting the Fire," **Proceedings**, Jun 1990, pp. 108-109.
28. Kotter, John P., "What Leaders Really Do," **Harvard Business Review** May-Jun 1990, pp. 103-111.

**NAVSWC MP 91-338**

29. Rowden, William H., "Leadership Versus Management," USNA Military Leadership: Traditions and Future Trends Conference, 10-12 Jun 1987, pp. 27-28
30. Gilbert, Ronald G., "Effective Leaders Must Be Good Followers Too," **Government Executive**, Jun 1990, p. 58.
31. Baile, Kenneth, **Historical Perspectives of NAVSWC/ Dahlgren's Organizational Culture**, NAVSWC MP 90-715, in publication.
32. Gable, John Allen, **The Man in the Arena** (Speeches and Essays by Theodore Roosevelt), Theodore Roosevelt Association, Oyster Bay, New York, 1987, p. 55.

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4. TITLE AND SUBTITLE Leadership — It's More Than Flesh and Blood				5. FUNDING NUMBERS	
6. AUTHOR(S) F. Edward Baker, Jr.					
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Surface Warfare Center (Code N10) 10901 New Hampshire Avenue Silver Spring, MD 20903-5000				8. PERFORMING ORGANIZATION REPORT NUMBER NAVSWC MP 91-338	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES					
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.				12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) The Naval Surface Warfare Center, which has a leadership centered corporate culture, invests heavily in and fosters the development of technical, managerial, and executive leadership. This report contains briefing material developed for the Center's Leadership and Management Development Program (L&MP) and the Program Managers (PM) training program. The focus is on the importance of leadership during dynamic change and organizational transformations. The concepts of leadership traits and the differences between management and leadership are used to challenge participants to: (a) seek knowledge of fundamental principles of leadership, (b) be inspired to further develop leadership capabilities within themselves, and (c) practice those principles in all aspects of life.					
14. SUBJECT TERMS Leadership Leader Leadership culture Leadership traits and characteristics Leader attributes Followership				15. NUMBER OF PAGES 52	
				16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20. LIMITATION OF ABSTRACT SAR		

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